

**MICRO-ELECTROMECHANICAL SWITCH FABRICATED BY
SIMULTANEOUS FORMATION OF A RESISTOR AND BOTTOM
ELECTRODE**

< This application is a DIV. of 09/941,031 filed on 8/26/2001, PAT. 6,098,082 >
BACKGROUND OF THE INVENTION

5 Technical Field of the Invention

The present invention relates generally to the field of micro-electromechanical switches, and, more particularly, to an apparatus and method of forming resistors and switch-capacitor bottom electrodes.

Description of Related Art

10 Rapid advances made in the field of telecommunications have been paced by improvements in the electronic devices and systems which make the transfer of information possible. Switches which allow the routing of electronic signals are important components in any communication system. Electrical switches are widely used in microwave circuits for many communication applications such as impedance matching,
15 adjustable gain amplifiers, and signal routing and transmission. Current technology generally relies on solid state switches, including MESFETs and PIN diodes. Switches which perform well at high frequencies are particularly valuable. The PIN diode is a popular RF switch, however, this device typically suffers from high power consumption (the diode must be forward biased to provide carriers for the low impedance state), high
20 cost, nonlinearity, low breakdown voltages, and large insertion loss at high frequencies.